

REMARKS

The Applicant thanks the Examiner for the careful review and consideration of the current application.

I. Status

In the Office Action, Claims 1 – 16 stand rejected under 35 U.S.C. §102(b) as allegedly unpatentable over U.S. Patent No. 5,295,140 (Crisler).

New Claims 17 - 22 have been added. It is believed that, in light of the succeeding comments that these new Claims are allowable. Applicant accordingly urges Examiner to make a statement to that effect.

II. Amendments

Amendments have been made to Claim 7. This amendment was made for grammatical purposes only. New claims 17 - 22 have been added.

III. Discussion of Rejections under §102

A. Standard under 35 U.S.C. §102

To sustain a proper rejection of a Claim under Sec. 102, all the portions of the claimed invention must be found in the cited art. Accordingly, when a piece of art fails

to disclose a single portion of a claimed invention, the Office cannot sustain a *prima facie* case of anticipation under Sec. 102.

B. Rejection over Crisler.

Claims 1 – 16 stand rejected as allegedly anticipated by Crisler. A closer reading of the Crisler reveals that it does not reveal several portions of the claimed invention. Accordingly the rejections of Claims 1-16 as recited in this Action do not establish a proper case of anticipation.

1. **Claim 1**

a. Contents

Claim 1 is directed to a “method of operating a wireless communication system[.]” The method comprises “in a controller, receiving streaming data contention-window slot assignment requests from streaming transmitter units[,] [and also] in the controller, assigning contention-window slot numbers to the streaming transmitter units” that send such requests. (Emphasis added.) Further, “the controller[] send[s] an indication of available contention-window slots to other transmitter units[.]”(Emphasis added.)

Further, “the other transmitter units, us[e] a randomly selected contention-window slot to begin transmitting[.]” (Emphasis added.) In addition, “the randomly selected

contention-window slot [in the other transmitter units] is selected from contention-window slots other than the assigned contention-window slots.”

b. Crisler

In the Office Action, the each of the steps of Crisler recited above are pointed out in the Office Action as allegedly being included in Crisler at Fig. 1, and in Col. 6, lines 25-50. With all due respect, the cited portion simply does not contain all the relevant portions of the claimed invention. A closer reading of Crisler *in toto* reveals that Crisler as a whole does not reveal many portions of Claim 1.

First, Fig. 1 in no way identifies **any portion of a method**. The Examiner will note that Fig. 1 is a structural diagram with no indication of how the device works. The cited portions of col. 6 do reveal how the structure works in part, but only in a limited sense. The cited portions reveal that the remote units deliver two types of messages to the controller, one in a reserved slot and one in an unreserved slot.

First, the claimed method is directed to two subsets of transmitters. One set is “streaming transmitters” and “other transmitter units[.]” First, to the “streaming transmitter units” (such as those sending audio and/or video data, those necessitating priority service and/or low latency and/or low packet failure rate), the controller assigns slots to the “streaming transmitters” to help with the above-cited concerns. To the “other transmitters” (i.e. the ones sending non-streaming information), the controller sends to

those “other transmitters” an indication of the reservation status of the “streaming transmitters.” From this indication, the “other transmitters” perform transmissions based on randomly selected contention-window slots, where the randomly selected contention-window slot is other than the slots reserved for the streaming transmitter units.

Thus, the invention treats each kind of transmitter unit differently. This is based whether the transmitter unit is a “streaming transmitter” or an “other transmitter.”

i. “receiving streaming data contention-window slot assignment requests from *streaming transmitter units*”

First Crisler fails to identify or distinguish from the general population of transmitters any *streaming transmitter units*, as recited in Claim 1. In fact, Crisler fails to distinguish between any transmitters at all. In this respect, each and every transmitter in Crisler is treated **the same** as any other transmitter. Accordingly, the above-mentioned portion of Claim 1 cannot be satisfied by Crisler.

ii. “the controller[] send[s] an indication of available contention-window slots to *other transmitter units*[.]”

First, there is no portion of Crisler that distinguishes between streaming transmitter units and other transmitter units. Accordingly, Crisler cannot send an

indication to “other transmitter units”, when Crisler fails to make a distinction between “streaming transmitter units” and “other transmitter units”.

ii. “the other transmitter units, us[e] a randomly selected contention-window slot to begin transmitting[.]”

Again, Crisler makes no distinction between “streaming transmitter units” and “other transmitter units.” Accordingly, Crisler cannot show that the “other transmitter units [(i.e. non-streaming units)] use a randomly selected contention-window slot to begin transmitting[.]” since Crisler fails to distinguish between the “streaming transmitter units” and the “other transmitter units.”

c. Conclusion for Claim 1

For the reasons stated above, among others, the rejection of Claim 1 under §102 as anticipated by Crisler is respectfully traversed. Correspondingly, Applicant respectfully requests that Claim 1 be passed to allowance.

2. Claims 2-11, generally

Claims 2-11 depend from Claim 1. Accordingly, for the reason noted above relating to Claim 1, among others, the rejection of Claims 2-11 under §102 as allegedly anticipated by Crisler is respectfully traversed.

3. Claim 2

In the Office action, it is alleged that Crisler discloses that the indication of the available contention-window slots is an indication of the first unassigned slot.

Specifically, the Examiner says that Crisler recites this at col. 5, lines 15-45. First col. 5 lines 15-34 describes the general operation of a radio system, and doesn't even touch upon contention slots. Col. 5 lines 35-45 describe the subdivision of time frames into specific reserved and random access sub-slots. There is *no indication* of any transmission of *any information* between the controller and the transmitters in this section.

Accordingly, the specific citation is well off the mark of what it purportedly reveals.

Secondly, a careful reading of Crisler shows that it does not make any mention or suggestion of anything near the concept that the "indication of the available contention-window slots is an indication of the first unassigned slot[.]" In fact, Crisler fails to indicate on how the controller determines the assignment of any specific time slot to any particular transmitter unit, aside from allowing a reservation.

Accordingly, Applicant specifically requests that the Examiner cite a portion of Crisler that shows or suggests that the available contention-window slots is an indication of the first unassigned slot. In the absence of such a citation, Applicant respectfully traverses the rejection of Claim 2.

4. Claim 3

In the Office action, it is alleged that Crisler discloses that the randomly selected slot is selected from slots greater than or equal to the first unassigned slot. Specifically, the Examiner says that Crisler recites this at col. 6, line 35.

The sentence at col. 6 line 35 states, in toto, “[a]n RF modem desiring to send a data packet without a reservation may transmit an unreserved data packet in one of the two random access subslots.” Again, there is *no indication* of any slot being selected from slots greater or equal to the first unassigned slot. Again, the specific citation is well off the mark of what it purportedly reveals.

Further, a careful reading of Crisler reveals that it does not mention or suggest any concept from where the randomly selected slot is selected, let alone that it is selected from slots greater or equal to the first unassigned slot. In fact, Crisler is silent on the how the “other transmitters” determine from where to select the slot, aside that it is selected randomly.

Accordingly, Applicant specifically requests a that the Examiner cite a portion of Crisler that shows or suggests that the randomly selected slot is selected from slots greater than or equal to the first unassigned slot. In the absence of such a citation, Applicant respectfully traverses the rejection of Claim 3.

5. Claims 4 and 5

In the Office action, it is alleged that Crisler discloses not just streaming data, but specifically that the streaming data is audio or video data. Specifically, the Examiner says that Crisler recites this at col. 3, lines 50-55.

Col. 3, lines 50 – 55 state, *in toto*:

“On the other hand, the communication units (101) must compete with one another for the opportunity to transmit communication packets to the host computer (140) on the inbound RF communication channel. As will be described later, according to the present invention the RF modem (110) and the base station (130) operate to provide orderly and efficient use of the shared communication channel by the communication units (101).”

Applicant would appreciate that the Examiner state how audio or video data may be gleaned from this passage. Additionally, a search of Crisler specifically fails to turn up any reference to the term “audio”. Further, a text search of Crisler specifically fails to turn up any reference to the term “video”, aside from the term used in conjunction with an attached video display unit.

Accordingly, Applicant specifically requests a that the Examiner cite a portion of Crisler that shows or suggests that the streaming data is audio or video data. In the absence of such a citation, Applicant respectfully traverses the rejections of Claims 4 and 5.

6. Claim 6

In the Office action, it is alleged that Crisler discloses that the number of assigned contention slots is limited. Specifically, the Examiner says that Crisler recites this at col. 4, lines 10-15.

Col. 4, lines 10 – 15 state, *in toto*:

“The RF communication channel is divided using Time Division Multiplexing (TDM) into a plurality of time slots that may be used by the communication units according to a specific set of allowed access modes. In the preferred embodiment, at least some of the time slots may be reserved for use by the communication units for the exchange of information packets. Furthermore, the time slots on the inbound channel are further subdivided, on a non-periodic basis, into at least two subslots that may also be used by the communication units according to another set of allowed access modes. “

Again, Applicant would appreciate that the Examiner state how the concept of a limited number of assigned contention slots may be gleaned from this passage. Additionally, a further reading of Crisler specifically fails to turn up any reference to the concept that the number of assigned contention slots is limited.

Accordingly, Applicant specifically requests a that the Examiner cite a portion of Crisler that shows or suggests that the streaming data is audio or video data. In the absence of such a citation, Applicant respectfully traverses the rejection of Claim 6.

7. Claim 7

Claim 7 is an apparatus claim containing many similarities to Claim 1. For the reasons discussed above relating to Claim 1, among others, Applicant respectfully traverses the rejection of Claim 7.

8. Claims 8-11, generally

Claims 8-11 depend from Claim 7. Accordingly, for the reason noted above relating to Claim 7, among others, the rejections of Claims 8-11 under §102 as allegedly anticipated by Crisler is respectfully traversed.

9. Claim 8

Claim 8 was rejected under the same rationale as Claim 2. For the reasons stated above specifically in Section III.B.3 above in relation to Claim 2, among others, the rejection of Claim 8 is respectfully traversed.

10. Claims 9 and 10

Claims 9 and 10 were rejected under the same rationale as Claims 4 and 5. For the reasons stated above specifically in Section III.B.5 above in relation to Claims 4 and 5, among others, the rejections of Claims 9 and 10 are respectfully traversed.

11. Claim 11

Claim 11 was rejected under the same rationale as Claim 6. For the reasons stated above specifically in Section III.B.6 above in relation to Claim 6, among others, the rejection of Claim 11 is respectfully traversed.

12. Claim 12

a. Contents

Claim 12 is directed to a wireless communication system. The system has a “transmitter unit wirelessly transmitting data to a dumb receiver unit”, and the “dumb receiver unit [is] adapted to receive data from the transmitter but not adapted to send an acknowledgement signal to the transmitter unit[.]” (Emphasis added) A “surrogate unit [is] adapted to acknowledge the reception of data for the dumb receiver unit with a surrogate acknowledgement signal to the transmitter unit.”

b. The Examiner cannot identify a “transmitter unit” with his definitions

The Examiner equates the dumb receiver to a video display unit in Fig. 1. The Examiner then equates the surrogate to the base station in Figure 1. However, the Examiner has failed to identify any transmitter unit wirelessly transmitting data to the alleged dumb receiver unit. Since no other units can be shown in Crisler, with the definition given to the system by the Examiner, no transmitter can exist.

c. A “dumb receiver unit adapted to receive data from the transmitter but not adapted to send [a] signal to the transmitter unit[.]”

Notwithstanding the non-identification of a transmitting unit in Crisler, in the Office Action it is alleged that the base station of Crisler is “adapted to acknowledge the reception of data for the dumb receiver unit with a feedback status signal to the transmitter unit[.]” In the Office Action, Crisler is cited at col. 6, lines 50-55 for these portions.

Turning to the cited portions, the citation does not reveal this. The citation reads:

“The data packet comprises user data information received at the base station (130) from the host computer (140) to be delivered to the communication units (101). The status feedback information comprises information that enables the operation of the inbound channel access protocol. The status feedback information is determined by the base station controller (135) and includes the current state of at least one of the inbound time slots, either random access or reserved access.”

A description of a data packet does not reveal or suggest that the base station is adapted to act as a surrogate base unit and send a surrogate acknowledgement to an unidentified (at least in Crisler) transmitter unit.

Further, Crisler in its entirety identifies communications and the protocol between the alleged surrogate unit and the alleged dumb base station. Crisler fails to identify any communication between the alleged surrogate unit and any other type of unit.

Accordingly, Crisler cannot sustain an allegation that it shows or suggest the providing

for a surrogate acknowledgement signal to another transmitter, especially when the communication between the identified surrogate unit and any other type of unit besides the alleged dumb unit is not even addressed in the citation.

Lastly, the rejection identifies a terminal adapted to receive data. If the Examiner is identifying the dumb unit solely as item 120 in Figure 1, then the identification is limited to the video display terminal. The Examiner will note that item 120, by itself, is not adapted to transmit, nor is it adapted to receive. Thus, the Examiner's analysis is improper if only item 120 is identified as the dumb unit, since the video display terminal 120 is not adapted for either reception or transmission.

If the Examiner simply uses the dumb terminal with the RF unit 110 adapted to it, the display would be able to receive, as recited in Claim 12. However, if the examiner wishes to attach RF unit 110, the Examiner has ostensibly overlooked the transmitter 117 contained within the RF unit 110. In this case, the dumb terminal 120 is adapted to both receive and transmit. However, the dumb unit as claimed is "adapted to receive" but "not adapted to send[.]" Accordingly, the equating of the terminal 120 with a dumb unit that is "adapted to receive" but "not adapted to send" is, in fact, an improper characterization of the Crisler structure, and Crisler cannot be used in the manner that is alleged in the Office Action.

d. Conclusion

For the reasons stated above, among others, Applicant respectfully traverses the rejection of Claim 12 as anticipated by Crisler. Applicant respectfully requests that the Examiner issue an indication of allowance for Claim 12.

13. Claims 13-16, generally

Claims 13-16 depend from Claim 12. Accordingly, for the reason noted above relating to Claim 12, among others, the rejection of Claims 13-16 under §102 as allegedly anticipated by Crisler is respectfully traversed.

14. Claims 13 and 14

It is alleged in the Office Action that Crisler shows multiple dumb receivers for each surrogate. In Figure 1, the “other units” are specifically described as units equivalent to the part 101, or the combination of the terminal with the RF unit. As stated before, the RF unit is adapted to both send and receive. Accordingly, the characterization of the other communication units in Fig. 1 as “dumb receiver units”, and those “dumb receiver units” further defined by Claim 12 as being “adapted to receive data ... but not adapted to send [a signal] to the transmitter” is an improper characterization of Crisler. Accordingly, the rejections of Claims 13 and 14 are respectfully traversed for this reason, among others.

15. Claim 15

It is alleged in the Office Action that Crisler shows that the surrogate system is a control unit for the system. In the Office Action it is alleged that Crisler at col. 6 lines 60-65 show or teach this portion of claim 15.

Crisler at col. 6, lines 60-65 states that:

Referring to FIG. 3, operation (300) of the communication unit controller (115) will now be described. The controller begins (315) by waiting for user data to be received from the video display terminal (120) or other input device of choice.

Again, the citation appears to be off mark. First, the claim reads on functionality of the alleged surrogate unit (i.e. the base station of Crisler, as identified above), while the selection reads on the actions and activities of the alleged dumb unit (i.e. the remote communication unit of Crisler.)

A further reading of Crisler gives absolutely no indication how the alleged surrogate unit (i.e. the base station of Crisler) acts as a control unit for the system. The base station merely doles out reservations to transmitting units. There is no indication other than the doling out of reservations to communication units on any facet of control of the system or the underlying units.

Accordingly, Applicant specifically requests a valid portion of Crisler that tells the reader that the streaming data is audio or video data. In the absence of such a citation, Applicant respectfully traverses the rejection of Claim 15.

III. New Claims

New Claims 17 - 22 have been added. These claims have many of the same features as described in relation to Claim 1 and 7 as related above. For these reasons, among others, it is believed that these new Claims 17 - 22 are allowable as well.

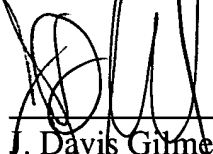
IV. Conclusion

It is believed that this Response and related remark places the above-identified patent application into condition for allowance. Early favorable consideration of this Amendment is earnestly solicited.

If, in the opinion of the Examiner, an interview would expedite the prosecution of this application, the Examiner is invited to call the undersigned attorney at the number indicated below.

It is believed that a one-month extension is required for this response. The Commissioner is hereby authorized to deduct the proper amount from Deposit Account 50-1698 for the new claims.

Respectfully submitted,
THELEN REID & PRIEST LLP



J. Davis Gilmer
Reg. No. 44,711

Dated: December 30, 2003

THELEN REID & PRIEST LLP
P.O. Box 640640
San Jose, CA 95164-0640
(408) 292-5800
(408) 287-8040